OAIS in the Lifecycle Management of Records

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OAIS in the Context of Records Management

- Preservation of archival electronic records
  - InterPARES Project Model: “Preserve Electronic Records
- Management of current records
  - Department of Defense standard for records management applications (DoD 5015.2-STD.)

Records

- **Instruments and by-products of practical activity**
- Not created for publication*, in general*
- Intended to communicate in specific contexts where there is an exceptionally high degree of shared information and knowledge
- In the case of transactional records, where the parties involved are well known.

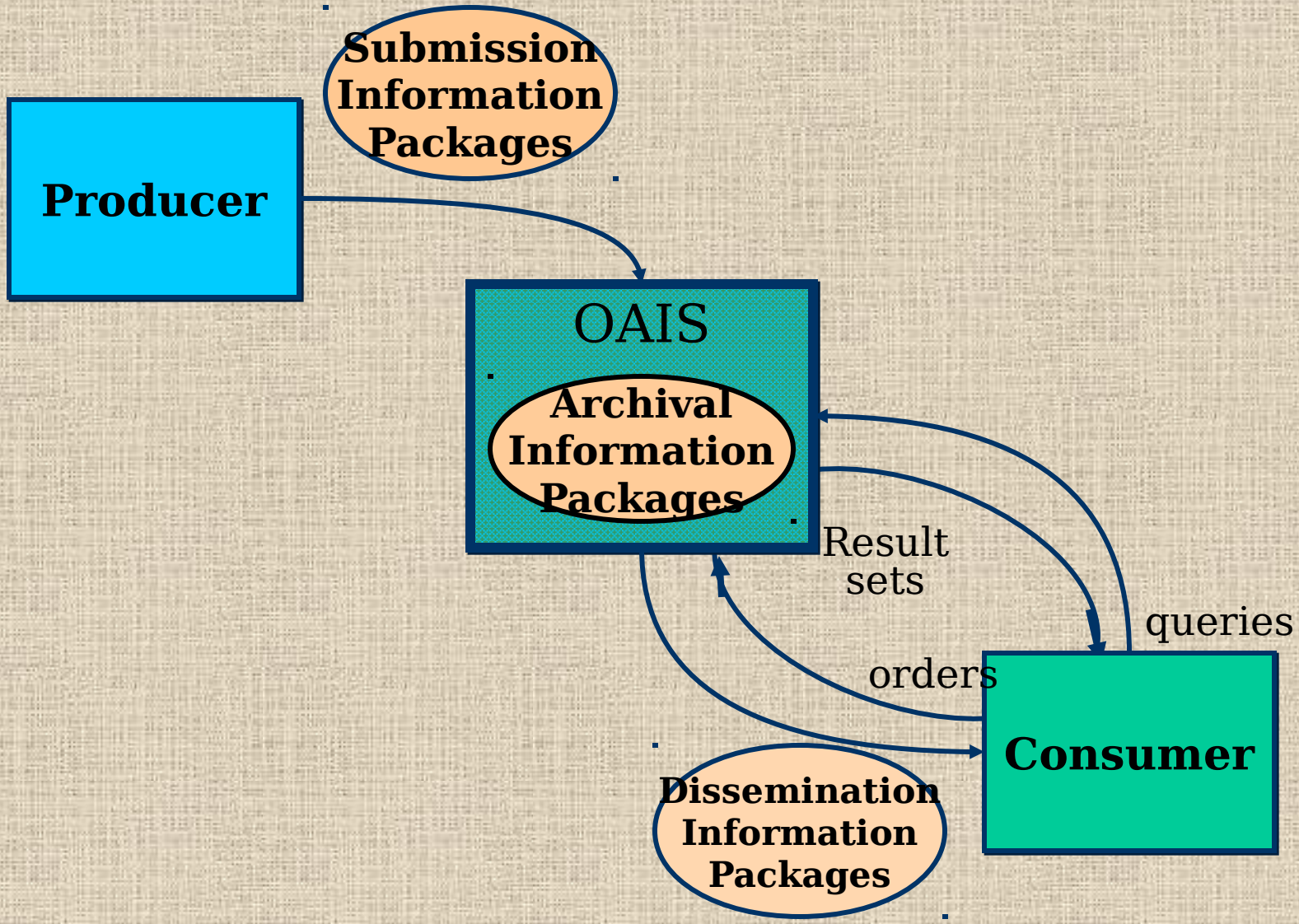
Archival Fonds

- Records exist only as members of organized collections with specific provenance
- The Archival Fonds is an *organic* collection that is accumulated in the course of activities.
  - Organic in the relationships among records in an archival fonds
  - Organic in the relationships between the fonds and the activities in which the records were created and used.

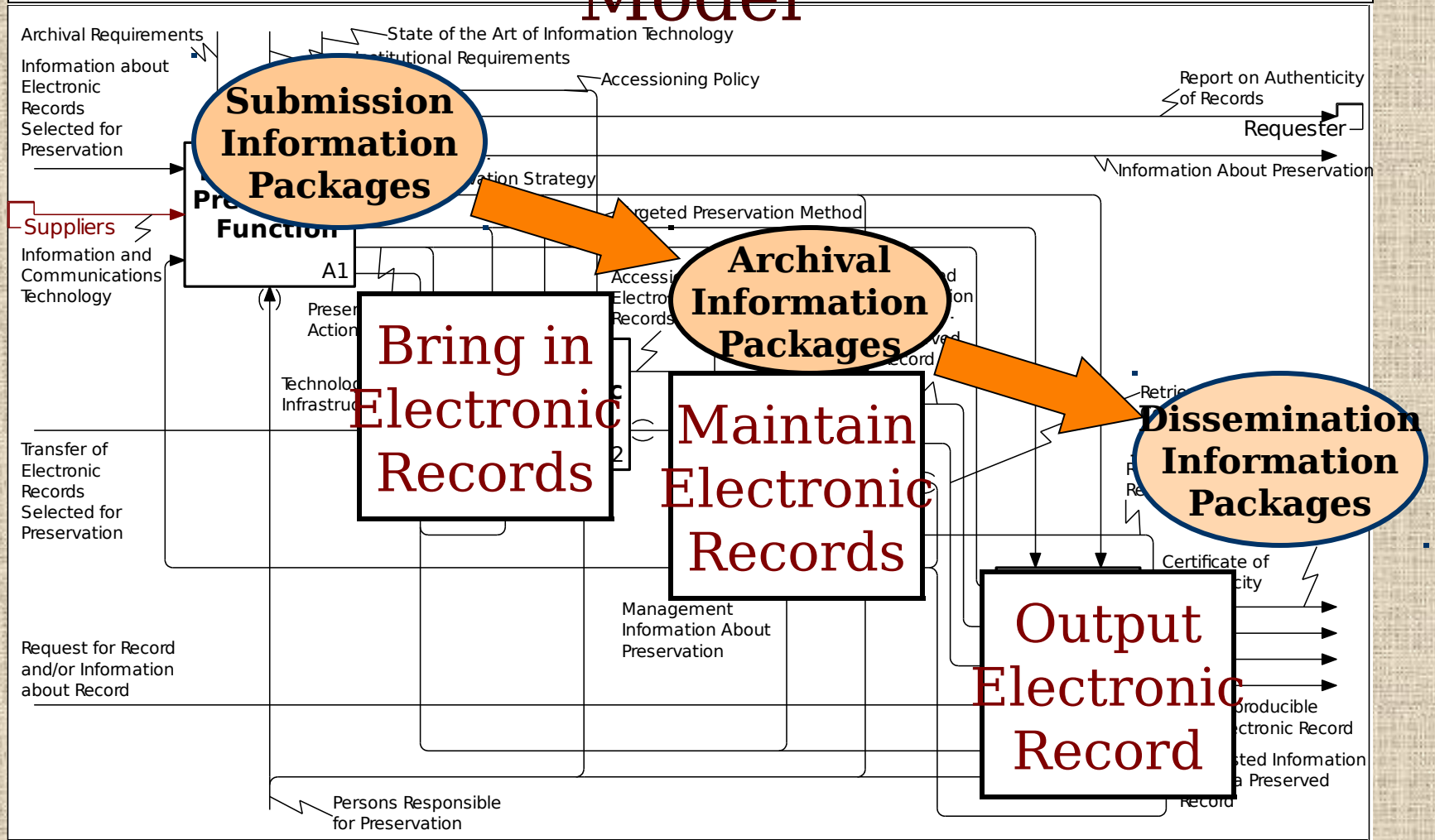
InterPARES

- International research on Permanent Authentic Records in Electronic Systems
- 7 multidisciplinary research teams
  - Asia, Australia, Canada, CENSA, Italy, Northern Europe, United States
- 4 Task Forces
  - Authenticity, Appraisal, Preservation, Strategies
- 10 National Archives
  - Canada, China, France, Hong Kong, Ireland, Italy, The Netherlands, Sweden, United Kingdom, United States
- 1998-2001 www.interpares.org

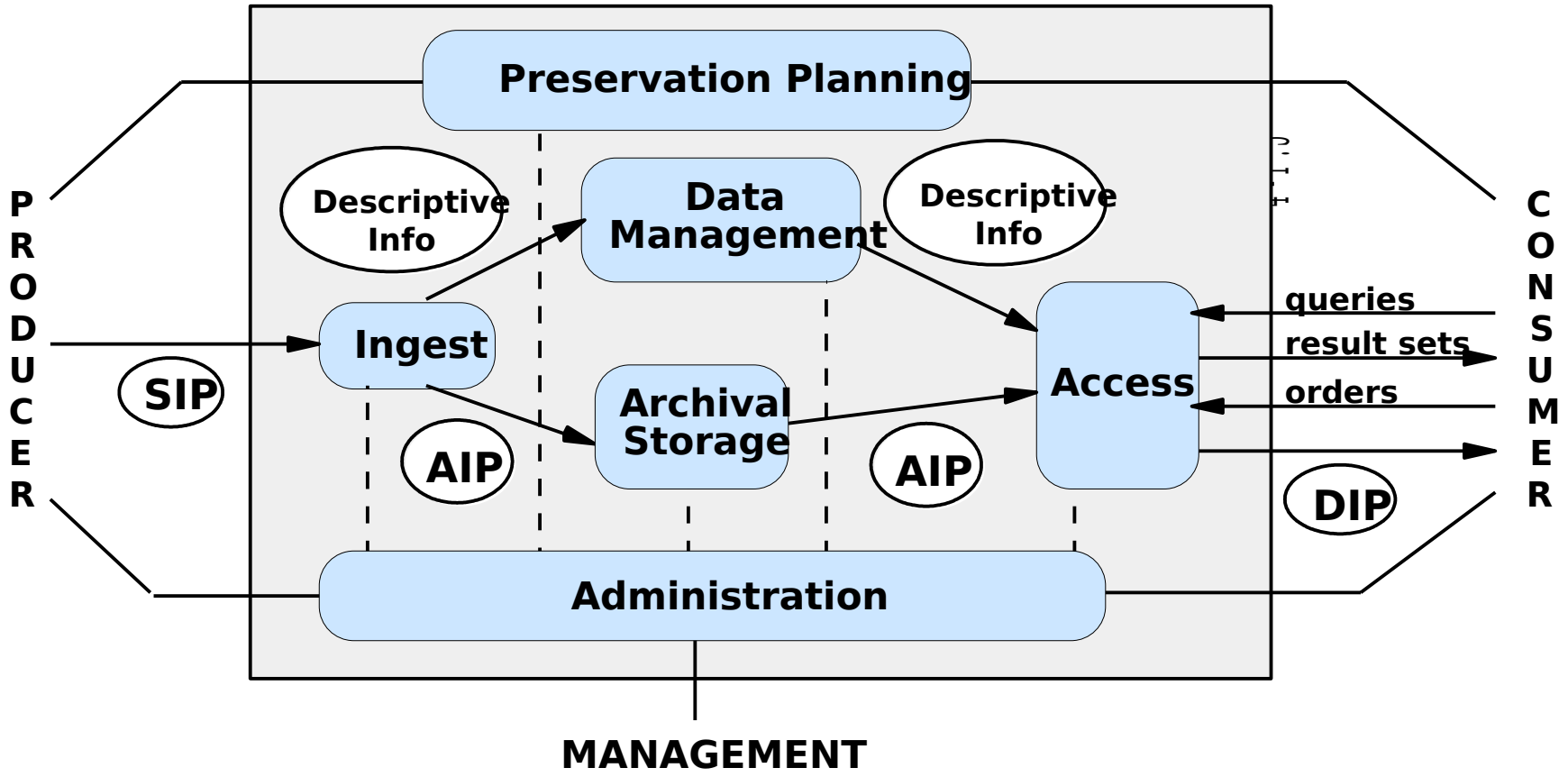
OAIS Overview



InterPARES IDEF0 Preservation Model



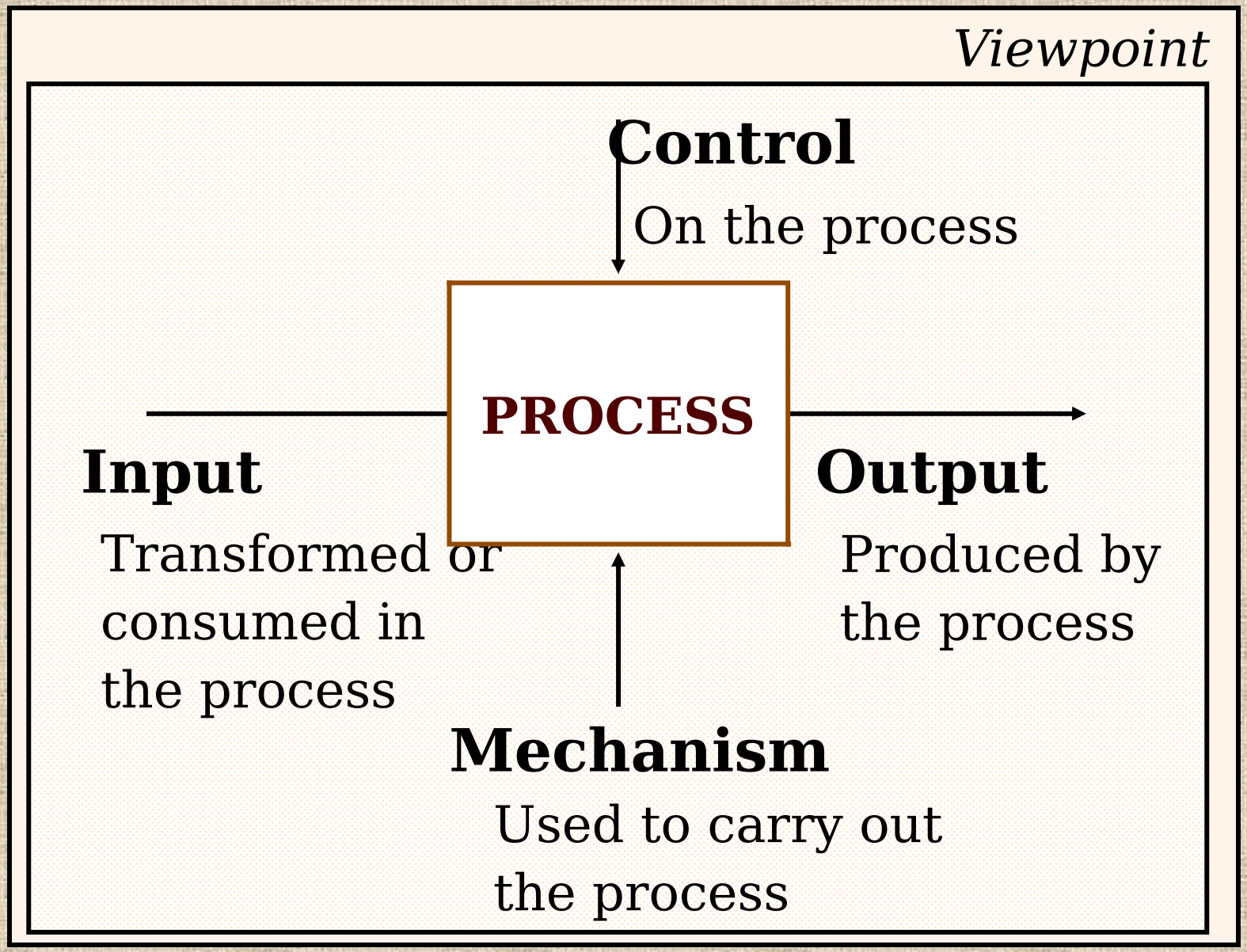
OAIS Functional Entities



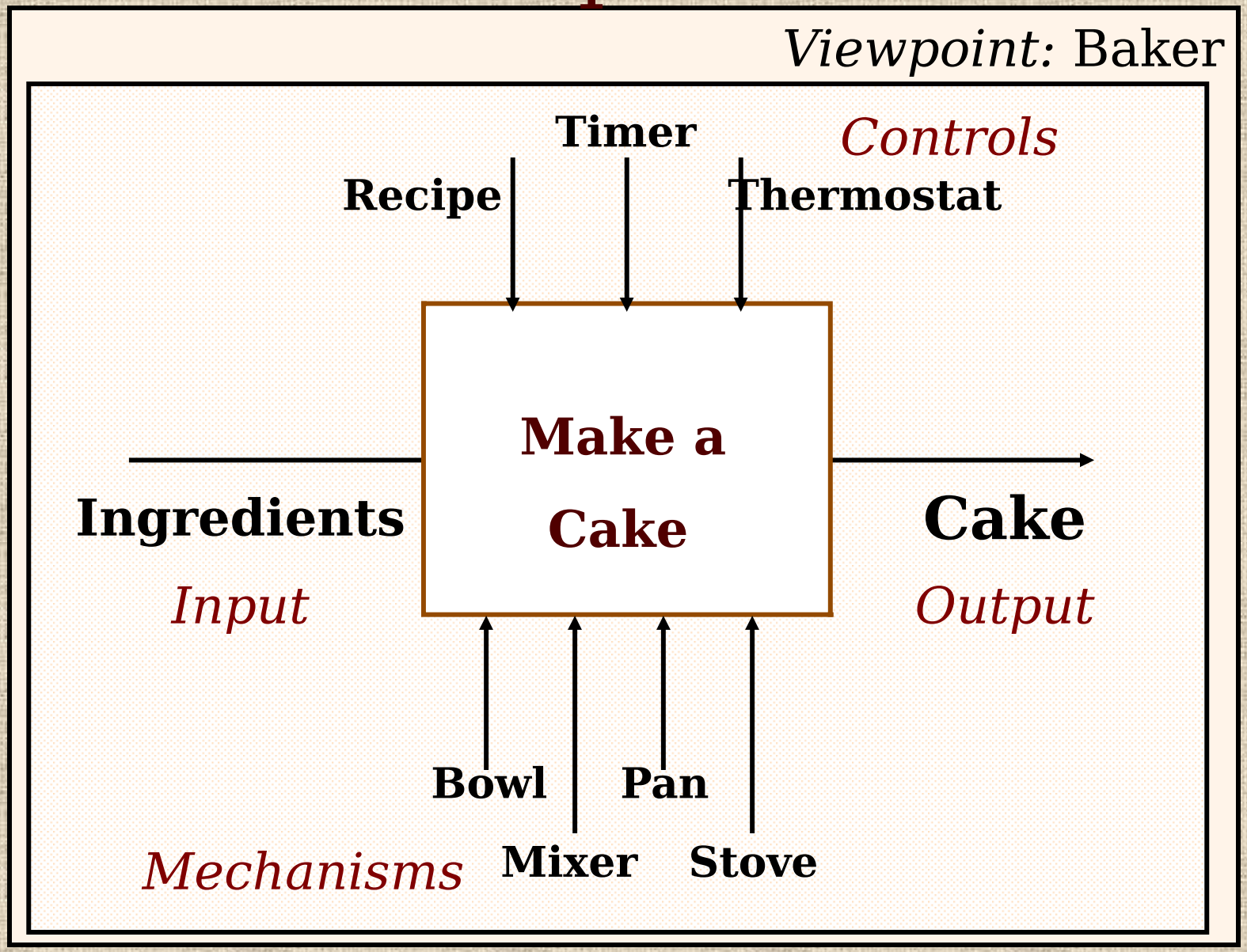
‘Preserve Electronic Records’ Model

- Extends over same range as OAIS
- A Subset of OAIS functions, excluding
  - Decisions related to what will be preserved
    - covered in the InterPARES ‘Select Electronic Records’ model
  - Decions on customers, customer services, and access rights
- Adds specifications and processes for preserving collections of records

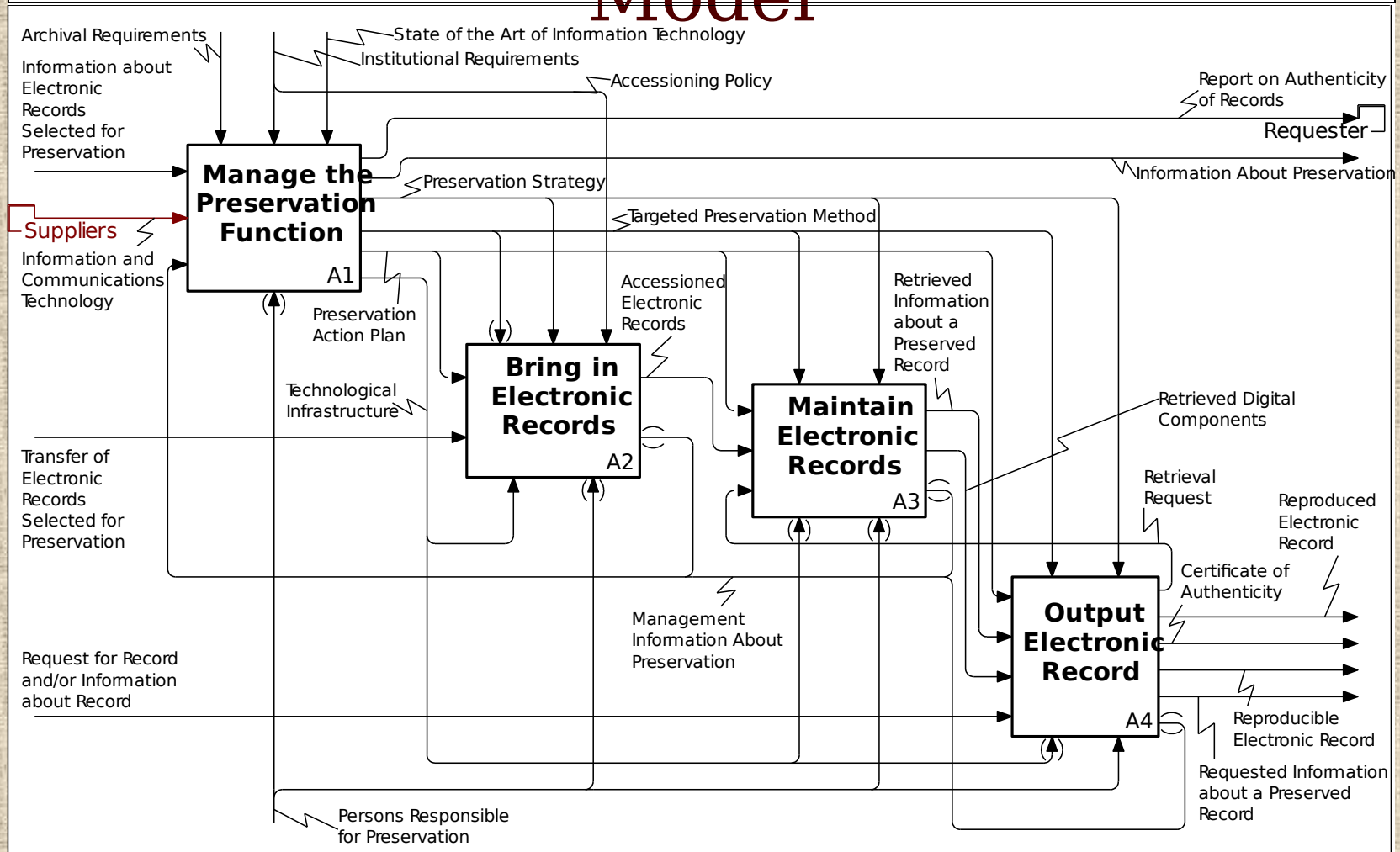
IDEF0 Notation



IDEF0 Example

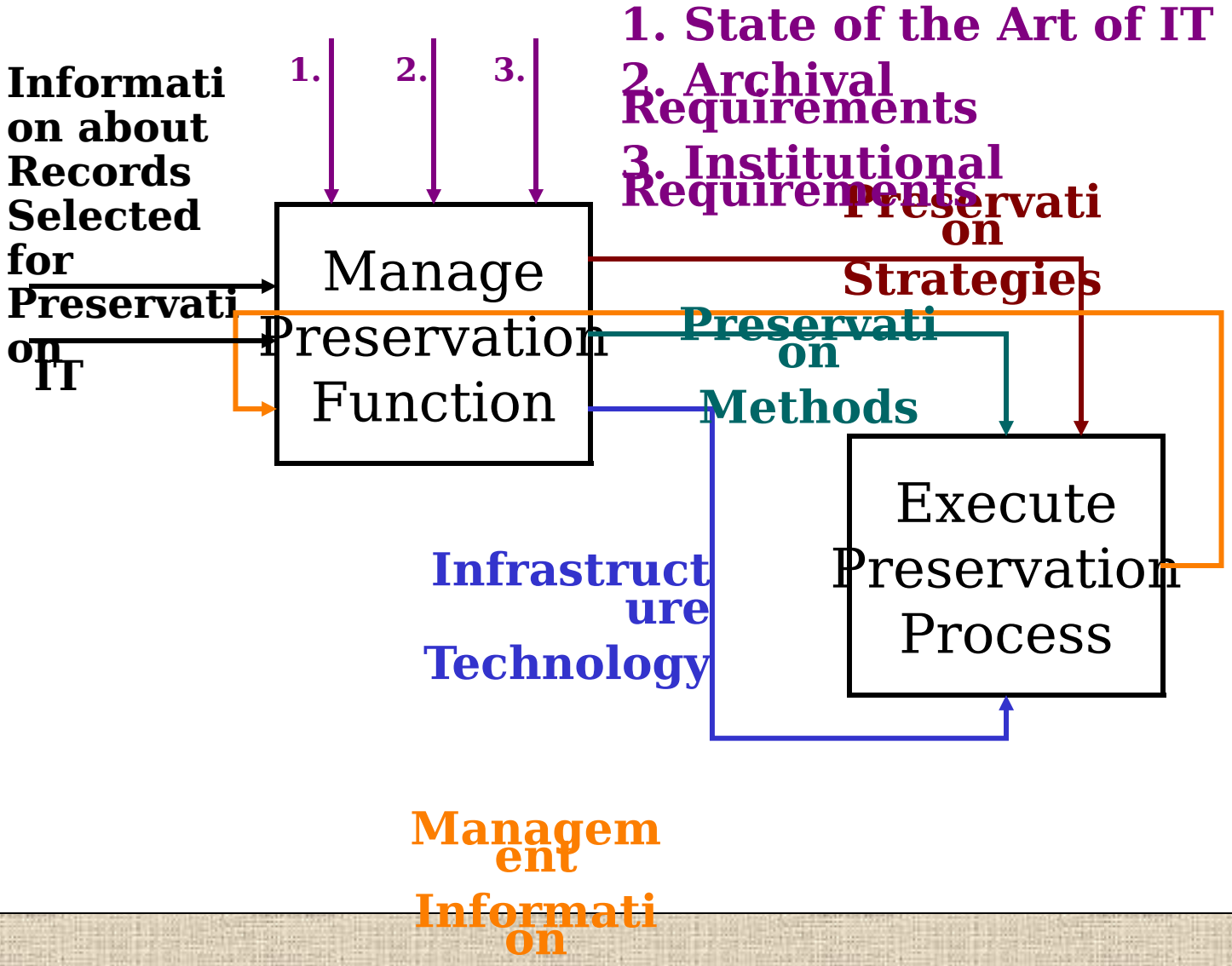


InterPARES IDEF0 Preservation Model

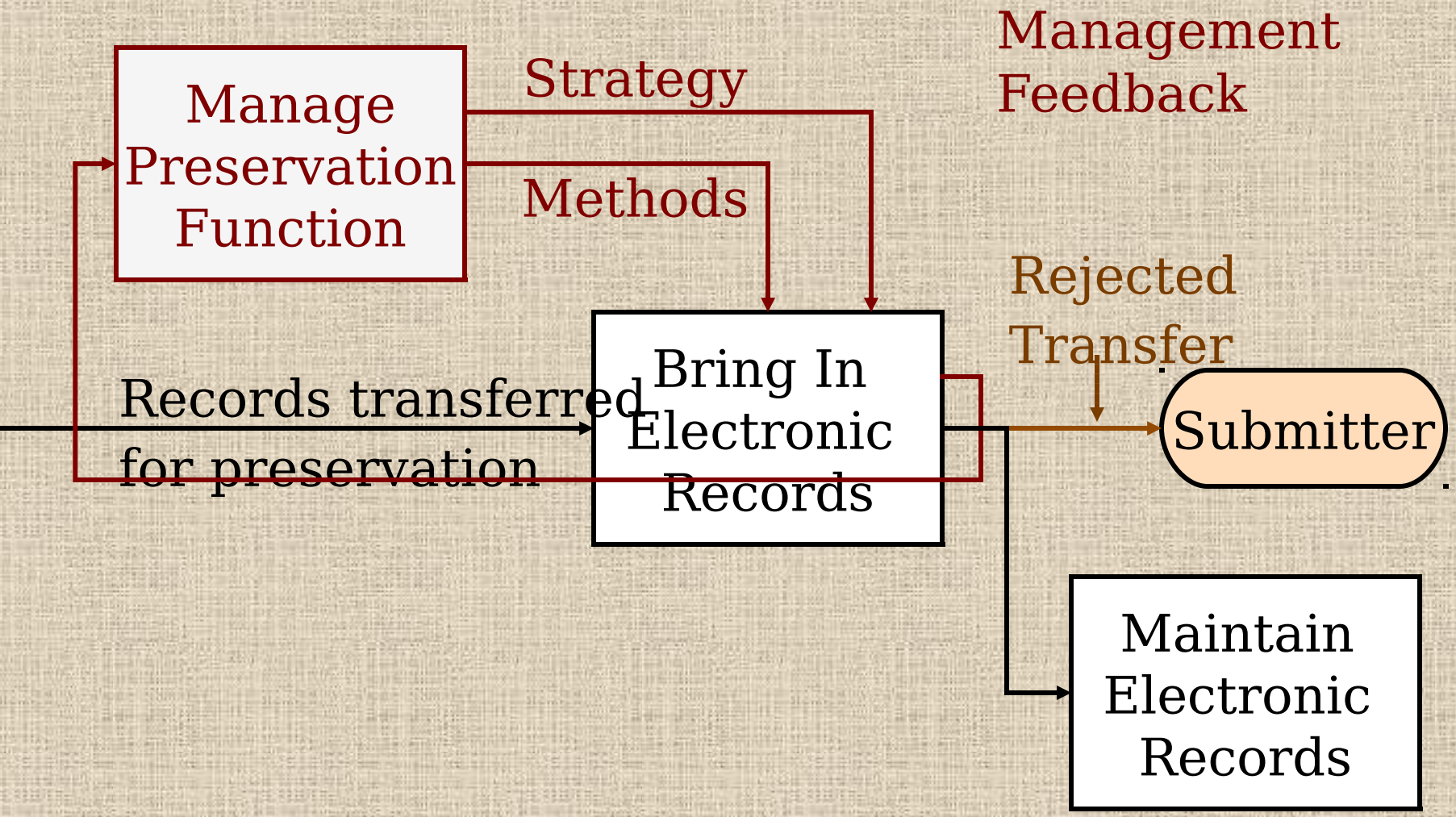


NODE:	TITLE:	NUMBER:
A0	Preserve Electronic Records	v 5.1

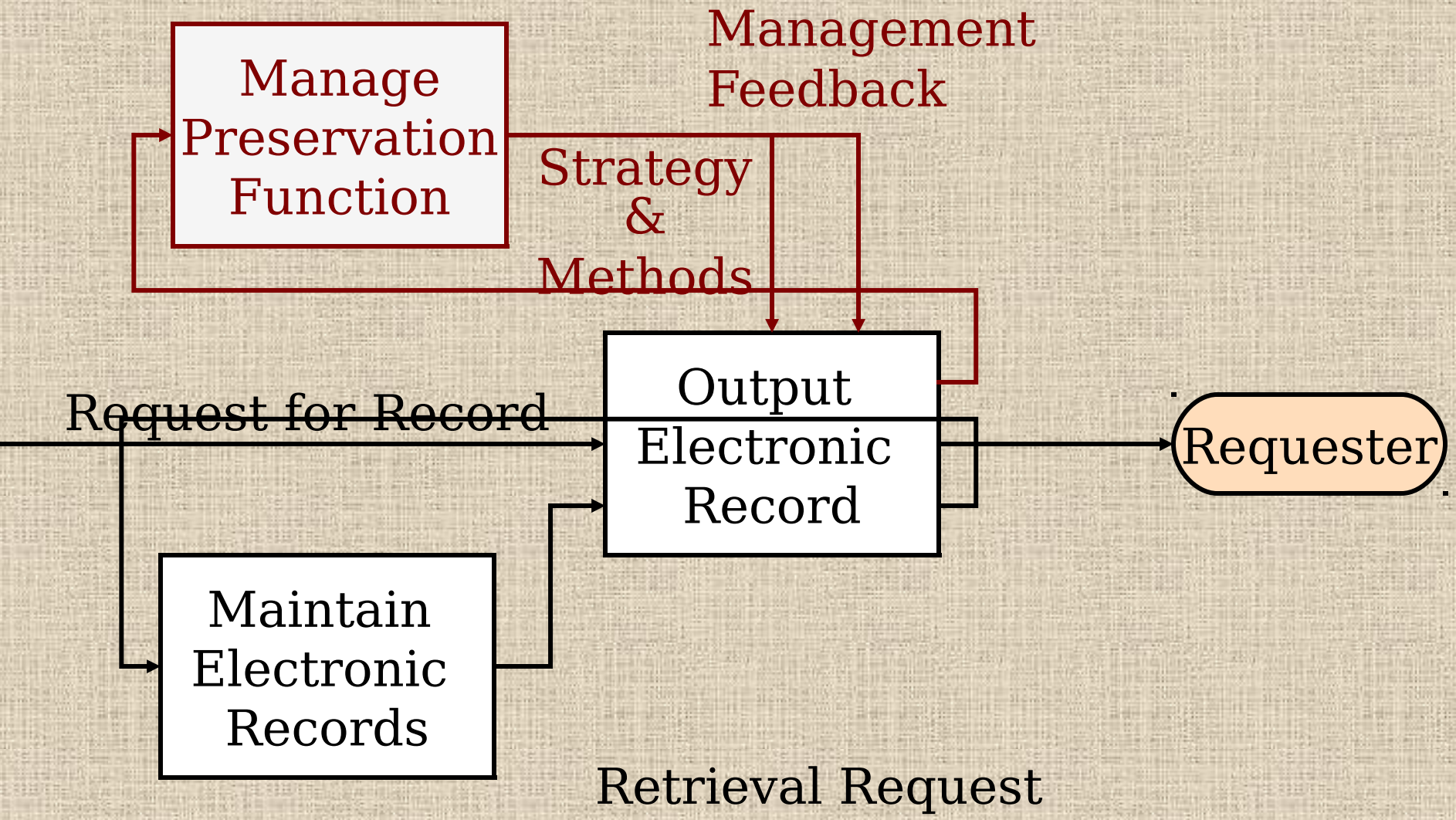
Management and Execution



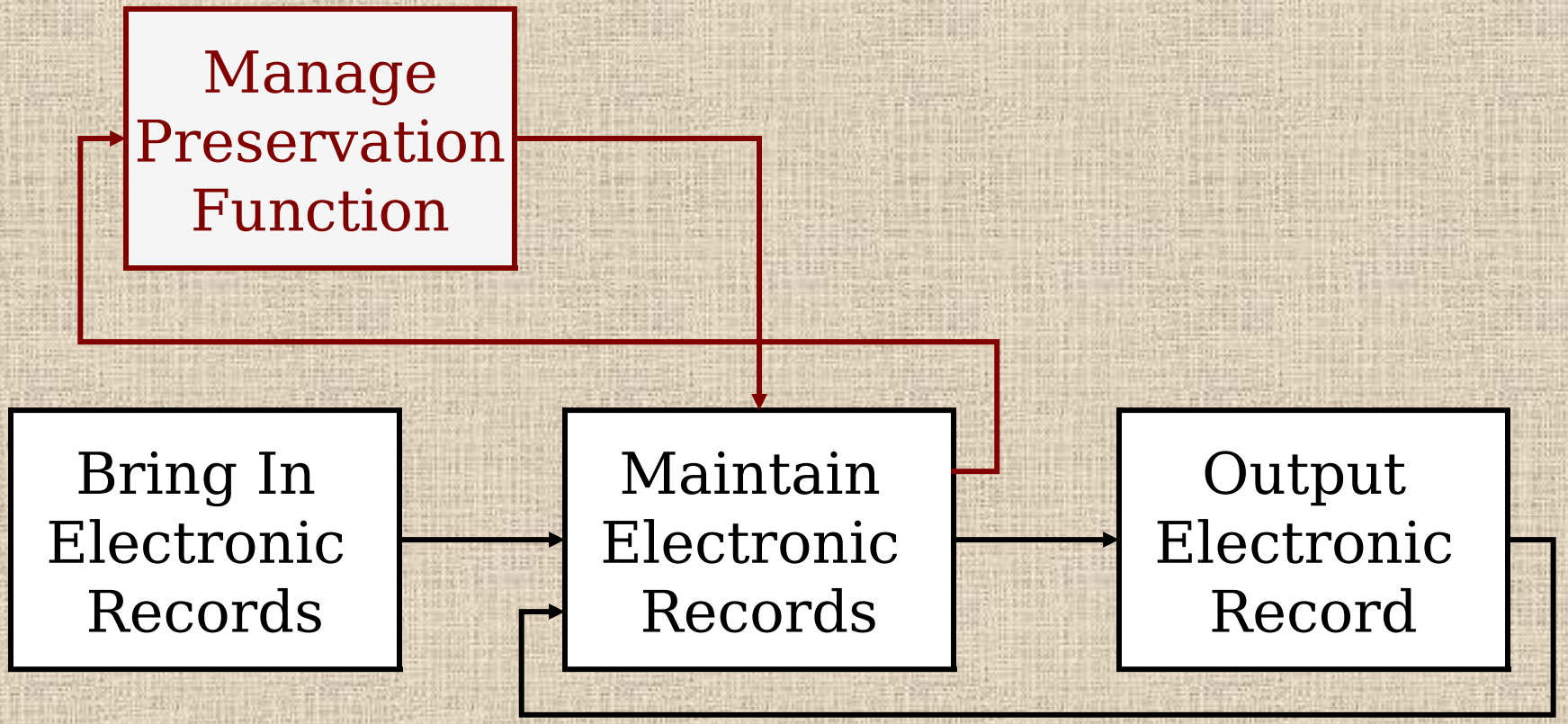
Ingest Function



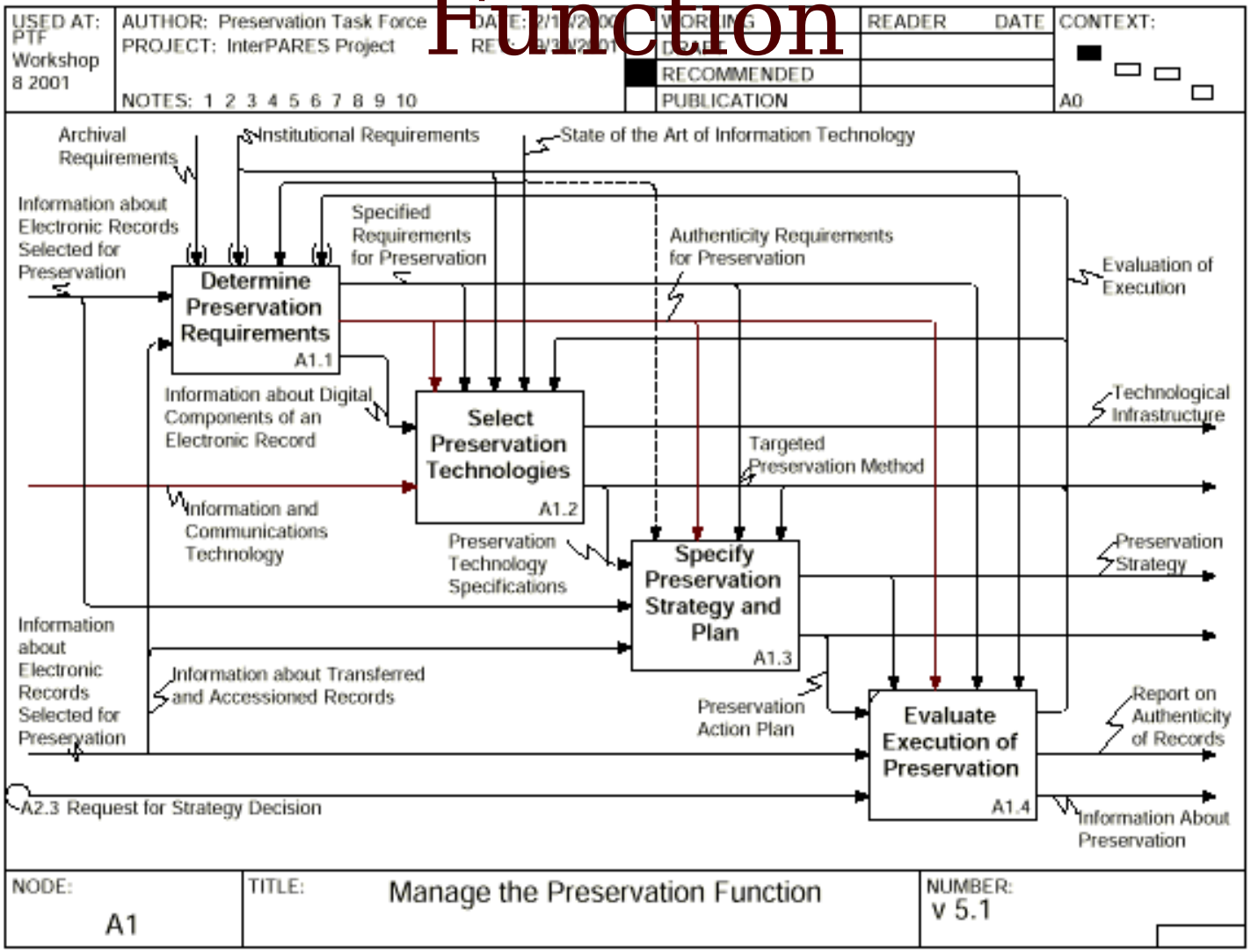
Dissemination Function



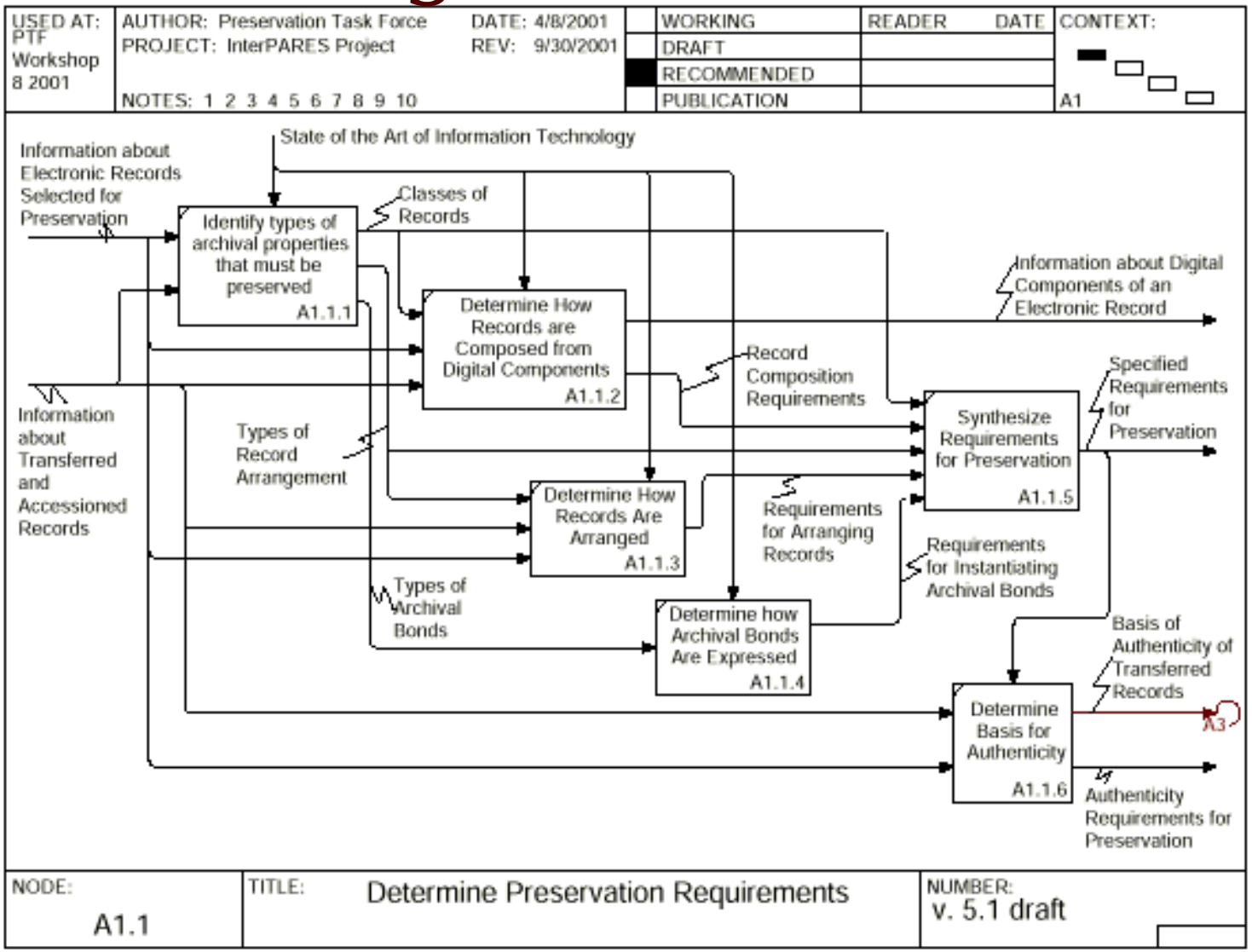
Dissemination Function



Manage the Preservation Function



Manage Preservation



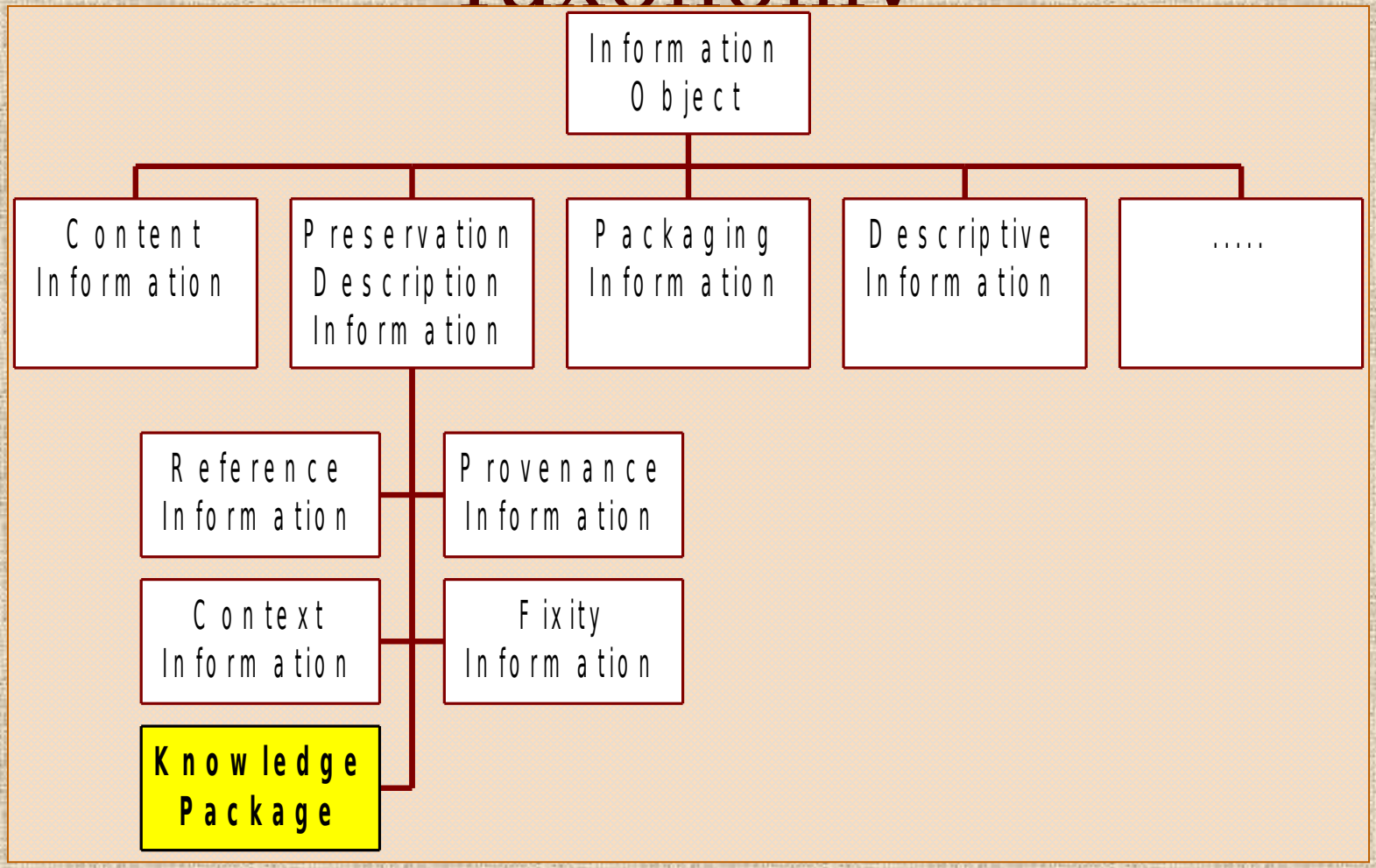
Determine Preservation Requirements

- Identify archival properties that must be preserved
  - For records
  - For archival aggregations of records
  - For expression of archival bonds
- Synthesize requirements for a body of records
- Determine basis of authenticity
  - Certification by preserver
  - Verification by user

Baseline Requirements for Preserving Authentic Electronic Records

1. Controls over records transfer, maintenance, and reproduction
   - 1.a Unbroken custody of the records is maintained
   - 1.b Security and control procedures are implemented and monitored
   - 1.c The content of the record remains unchanged after reproduction
2. Documentation of preservation & reproduction processes and their effects
3. Archival description of the fonds includes information about changes the records have undergone since they were first created.

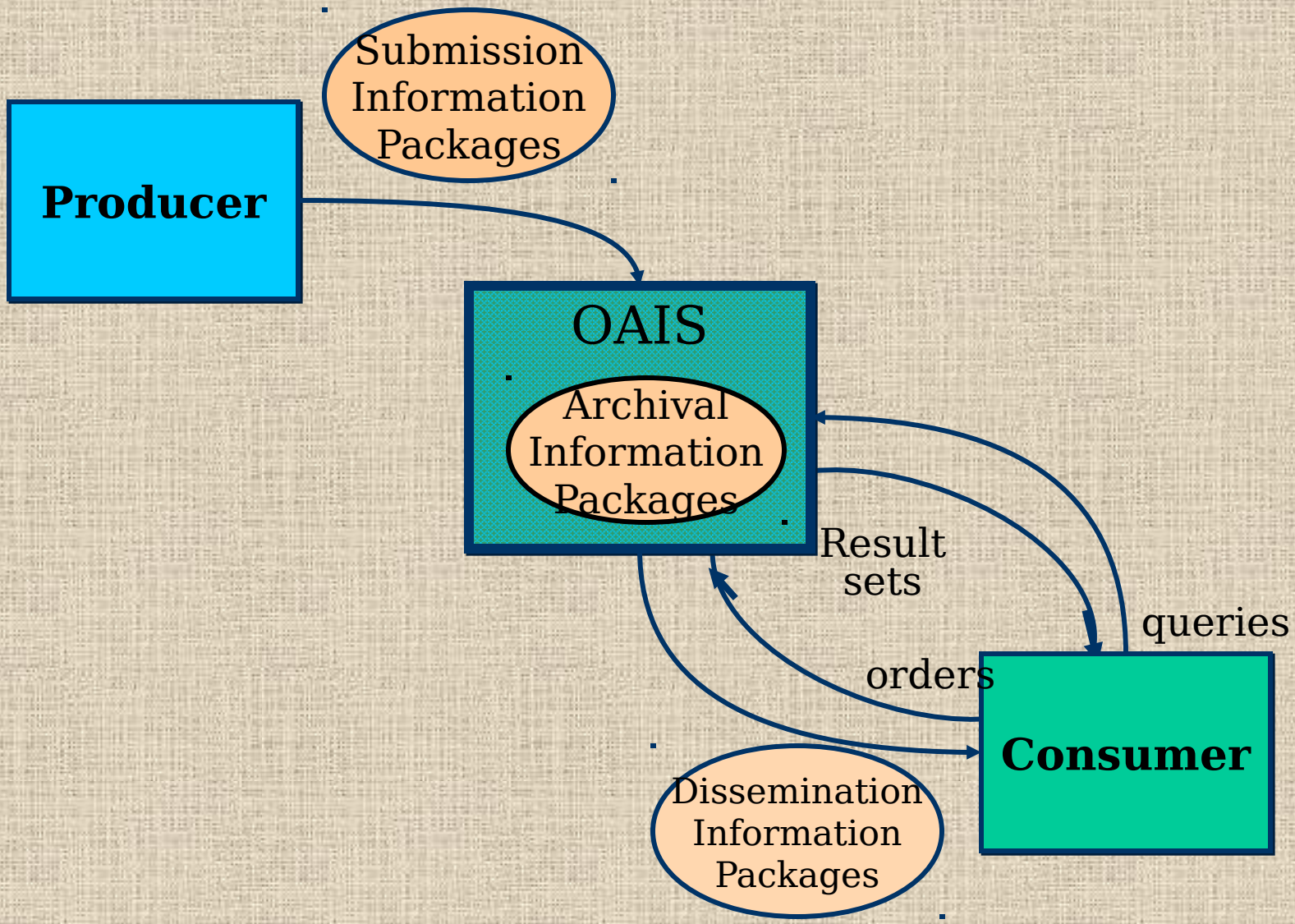
OAIS Information Object Taxonomy



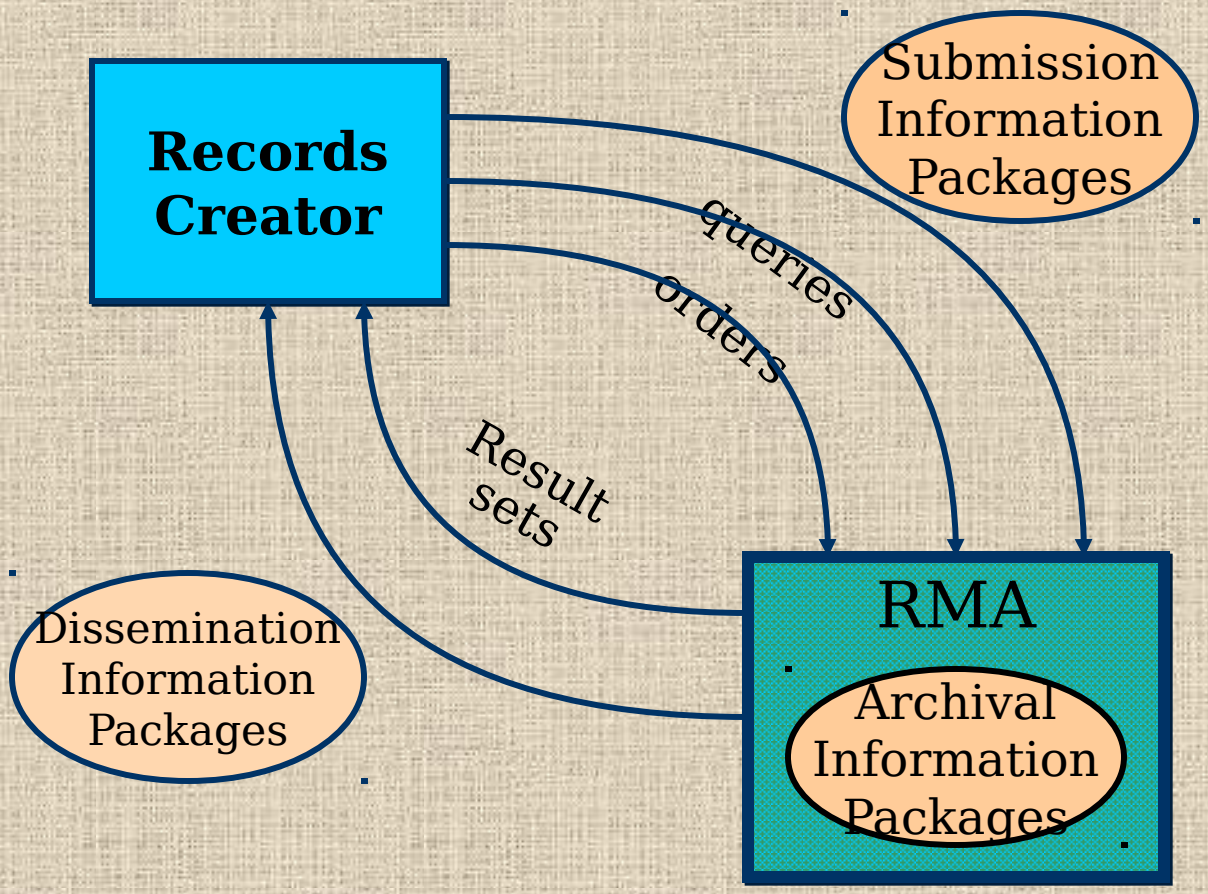
OAIS & Current Records

- “Long-term” preservation issues arise in many cases of maintaining current records
  - Patent Case Files
  - Drug Case Files
  - Medical Records
  - Real Property Records
  - Aircraft Records
  - Weapons Systems Records

OAIS Overview



OAIS v. Records Management Application



RMA = Records Management Application, DoD 5015.2

OAIS & Records Management Application

- Producer = Records Creator = Consumer
- Submission Information Packages:
  - Individual records
- Archival Information Packages:
  - Records aggregated over time
- Dissemination Information Packages:
  - individual records & aggregates (files)
- The RMA standard (DoD 5015.2) leaves preservation over time as an implementation issue

Thank You

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